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Patient Safety

SPRING 2002

A quarterly newsletter to assist DoD hospitals with improving patient safety

Dr. William Winkenwerder, Mr.Thomas Corrado and Gen. Lee Rodgers with the Patient Safety Working Group at San Antonio training session.

Patient Safety Program High Priority for Health Affairs

Asst. Secretary Addresses San Antonio Training Class

Dr. William Winkenwerder, Assistant Secretary of Defense (Health Affairs), outlined his vision and priorities for the Military Health System during a keynote address to the Patient Safety Training class in San Antonio on January 9, 2002. He stressed that the Military Health System Patient Safety Program is a high priority for Health Affairs.

Dr. Winkenwerder told the over one hundred and forty attendees that the work they are doing in patient safety is directly related to achieving Secretary Rumsfeld's vision of a military health system that is the preeminent health care delivery system in the nation. He identified four strategic priorities for the MHS as it works to enhance even further its current well-earned reputation for high quality. Over the coming year, the focus of the MHS will be to:

- Improve Force Health Protection and Medical Readiness
- Improve the Performance of the TRICARE Program
- Improve Coordination, Collaboration and Communication with Other Key Entities
- Address Issues Related to Recruitment and Retention of Military Medical Personnel

Dr. Winkenwerder underscored the importance of Patient Safety Program in realizing the full potential of each of these priorities. Since September 11th attention to medical readiness, always the principal mission of the MHS, has become especially sharp. Patient safety and quality initiatives directly impact the successful implementation of the anthrax vaccination program, new drugs review and adoption of chemical and biological warfare countermeasures. Specific objectives adopted to improve the performance of the TRICARE program are related to quality improvement and leadership support. Dr. Winkenwerder cited leadership as a critical component of this priority, and supported the JCAHO standards of leadership in patient safety as important criteria for the MHS. The relationships forged thus far with the Agency for Healthcare Research and Quality and the Department of Veterans Affairs around patient safety are an example of improved coordination, collaboration and communication. These efforts not only foster quality improvements within the MHS, they also allow the military to actively engage with other government agencies and the private sector - an essential step in becoming a recognized world leader. Recruitment, retention and compensation directly affect the ultimate success of the patient safety program, and military healthcare in general. In recognition of the fact that "the best assurance of a quality program is quality people", Dr. Winkenwerder is working closely with the Surgeons General and the UnderSecretary of Defense, Dr. David Chu, to squarely address these issues.

Specific elements of the MHS Patient Safety Program - creating a culture of safety, focusing attention on close calls, teamwork initiatives, sharing information and resources through the Patient Safety Center at the Armed Forces Institute of Pathology, and training MTFs to implement the Program - were addressed by Dr. Winkenwerder. He shared his conviction that the patient safety training and the resulting improved system of patient safety that will evolve as the program matures, will help achieve his vision of a military healthcare system that is in a position to lead the nation.

Medical Team Management

Air Force Begins Training

The Air Force is taking a leading role in meeting mandates for healthcare team coordination. Plans have been formulated to begin tri-service training in Medical Team Management (MTM) during the coming year.

MTM, developed by Major Fred Stone and his team at Elgin AFB, began as a crew resource management program for medical personnel. Originally developed to address teamwork and communication issues identified as contributing factors to an event resulting in patient harm at Eglin AFB, the widespread application of MTM in promoting patient safety has become a major focus of the Air Force patient safety efforts. Air Force Patient Safety Program Managers Lt. Col. Beth Koshin and Lt. Col. Cynthia Landrum-Tsu, working collaboratively with Capt. Glenn Merchant, Director, Center for Education and Research In Patient Safety at USUHS, have developed a formal training course that expands the original MTM concept to an interactive program. This new format includes a three-day train-the-trainer module and a medical treatment facility course consisting of facilitated discussion and teamwork. Course content includes discussion of obstacles to effective teamwork, tools to use in dealing with those obstacles and critical success elements that must be present for the delivery of safe patient care.

Over 44,000 Air Force medical personnel worldwide will receive this expanded MTM training. All Air Force inpatient MTFs will be trained by the end of September 2002, with rollout to ambulatory MTFs planned to commence in October. The DoD will facilitate Army and Navy participation as DoD patient safety funds for MTM become available. For more information on the MTM or specific training schedules, please contact Lt. Col. Kohsin at the DoD Patient Safety Center, 301-295-8125, or beth.kohsin@pentagon.af.mil.

MEDMARx: Improve Medication Error Reports

DoD Encourages Use in MTFs

The DoD Patient Safety Program plans to actively encourage the widespread implementation of MedMARx as part of its medication error reduction initiative after receiving favorable reviews from facilities involved in a pilot program. MedMARX is a national database housed at the United States Pharmacopeia (USP) designed to document and track medication errors. This internet-based medication error reporting system allows participating hospitals to anonymously enter and submit actual, near miss and potential errors. In addition to its tracking and trending value, MedMARx provides comparative data to benchmark performance, and assists in meeting standards set by the Joint Commission on Accreditation of Healthcare Organizations.

Currently, approximately 100 sites within the Military Health System have access to MedMARx. However, many are not utilizing the system fully. The experience of the National Naval Medical Center in Bethesda, Maryland should encourage those MTFs who find implementation a challenge. Bethesda was part of the MedMARx pilot program and is a strong advocate of the system. LCDR Ronald Nosek, Manager, Clinical Pharmacy Services, believes the advantages of MedMARx justify the time and effort initially required for implementation. Once users are familiar with MedMARx, he confirms that data entry is efficient and accomplished in 3-5 minutes per entry. Use of MedMARx provides a standardized, comparative, data-rich system that allows MTFs to track their own practice and benefit from the best practices of others.

For those MTFs implementing MedMARx, LCDR Nosek recommends the following strategies: identify a CHAMPION to take responsibility for implementation; secure cooperation and support from COMMAND; COMMIT to the program fully; COLLECT previous errors for entry; articulate a DEPLOYMENT STRATEGY and train 3-5 people for order entry; start by using EXISTING DATA in the MedMARx system; aggressively UTILIZE the USP EXPERTISE for assistance in overcoming implementation problems.

During the coming year, patient safety funding will be used to purchase MedMARx for all MTFs. Recognizing that the system will be effective only if it is fully utilized, the Patient Safety Program will provide support to make deployment of MedMARx successful. LCDR Nosek will be working with the Patient Safety Center to assist MTFs implement MedMARx. It is anticipated that adoption of MedMARx within the Military Healthcare System will raise standards for reporting and will help to prevent medication errors.

Patient Safety Links

Interesting Resources For You To Explore

US Pharmacopeia:
www.usp.org
Mission: Promote public health and establish standards to ensure quality of medicines.
SPECIAL INTEREST: 1999 MedMARX Data Survey; (2000 survey on-line soon)

The Institute For Healthcare Improvement (IHI):
www.ihi.org
Mission: Lead the improvement of health care systems.
Special Interest: IMPACT - new program utilizing a network of hospitals involved in quality improvement projects. MTFs interested in participating should contact service reps.

National Patient Safety Foundation:
www.npsf.org
Mission: Measurably improve patient safety in the delivery of health care.
Special Interest: Patient Safety Listserv; "Focus On Patient Safety" - a free, quarterly publication; Highlights from the Annenberg IV Conference; Audio-conference: "Communicating About Unexpected Outcomes and Errors".

The Commonwealth Fund:
www.cmwf.org
Mission: Support independent research on health and social issues.
Special Interest: "Room For Improvement: Patients Report On The Quality Of Their Healthcare" - new study estimating 8.1 million American households have experienced a medical or drug error.

Quality and Safety in Healthcare (formerly Quality in Health Care):
www.qualityhealthcare.com
Quarterly journal published by British Medical Journal, dedicated to patient safety-interdisciplinary, international content, contributions from medical and non-medical professions relating to quality and safety. FREE ONLINE until July 1st.

Patient Safety In Action

Experiences and suggestions from the field

This issue of Patient Safety is focused on implementation. In keeping with that theme, we highlight below three examples of recent implementation efforts. Each of these organizations, and the personnel involved, are to be commended for their proactive approach to patient safety. A special thanks to the US Transportation Command, Bremerton Naval Hospital and the 74thMDG Medical Center at Wright-Patterson AFB for their efforts and their contributions to the MHS Patient Safety Program.

A Patient Safety Improvement System for Aeromedical Evacuation

Taking care of patients during air transport presents unique patient safety challenges. The airplane itself is not a naturally therapeutic environment; the nearest physician may be thousands of miles away; there are multiple points of contact and hand-offs for each patient; the system crosses all services and must maximize cooperation, communication and teamwork among services. Despite these added challenges, the Aeromedical Evacuation (AE) system, like all health care systems, must take full responsibility for the errors that occur within it.

Traditionally, AE quality activities have been accomplished in isolation with no system for sharing data or lessons learned. With guidance from the DoD Patient Safety Program and flight safety, working groups from Air Medical Command have met to define a process for incident review and to develop an event classification and categorization system. They have also been developing a web based data collection tool. This Patient Safety AE Tool provides a centralized database for the collection of all AE events and near misses, and will result in data analysis to aid in system improvement. It is expected to be ready for general use this spring, and is located at https://amc.scott.af.mil/sg. AE safety representatives would like to include a briefing and breakout session in future patient-safety training conferences to further integrate AE safety concerns with those of their ground-based colleagues.

The US Transportation Command has shown a great deal of interest in improving patient safety. It anticipates that these efforts to improve process and system will directly benefit patients and will help it to provide the very best "Care in the Air".

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Identification, Classification and Reduction in Potential Medication Error Situation (PMES) Reduces Adverse Drug Errors

Naval Hospital, Bremerton, a 61-bed medical center, decided to take a closer look at the way medication storage can contribute to potential medication error situations. A team of two observers analyzed all areas of medication storage in the OR, Anesthesia and the PACU. Their goal was to identify Potential Medication Errors, defined as (a) different medications of similar container appearance in a proximal area or (b) same medications of different strength in a proximal area. Digital photos were taken of these situations and were reviewed and classified according to the *probability* of occurrence, (A,B,C) and the *severity* of the reaction (1,2,3) that would occur should the medication error actually happen.

The team identified 27 PMES. Eight situations classified as 1A or 1B were corrected immediately; nine falling into the 2 A,B and C categories were corrected over the following two weeks. Class 3 situations were not corrected. A second review two weeks later by a different team revealed 10 PMES, with only one needing correction.

Bremerton offers the following tips and lessons learned from their experience: clearly define PMES before searching for them to decrease confusion during the search; document PMES in both written and photo form; advise and educate other staff about your search; categorize each PME; correct 1A and 1B PMES immediately. One especially practical piece of advice - be aware of contributing factors that can be easily corrected. At Bremerton, staff discovered a central reason for errors was a small, cramped refrigerator that led to overcrowding of medications. This refrigerator was replaced with a larger one.

Credit for this initiative goes to all members of the IHI patient safety team in the Operating Room at Naval Hospital Bremerton, specifically CDR Frevert, LT Burford and LCDR F. DelaCruz, MC. For information contact: CDR Gayle Frevert, RN, Head, Perioperative Nursing, Naval Hospital, Bremerton; (360) 475-4441, DSN 494, frevertg@pnw.med.navy.mil

Patient Safety Down Day at 74th Medical Group, Wright-Patterson AFB

The 74MDG Medical Center at Wright-Patterson AFB recently dedicated an entire day to raising awareness of patient safety by scheduling a Patient Safety Down Day. The program's primary objective was to build a culture of patient safety. Ongoing goals were identified which included: increased awareness of unsafe practices/systems; implementation of mechanisms to allow learning from errors; developing strategies to improve communication between patients and staff; enhancing performance through comprehensive monitoring and thorough analysis of untoward events; developing proactive methods to prevent patient/staff harm. Action steps were developed to provide a practical guideline for accomplishing each goal. Attendance included hospital leadership and clinical and non-clinical staff.

The day provided a comprehensive review of existing patient safety policies and procedures, including Medical Group Instructions and Operating Instruction, JCAHO standards, JCAHO Sentinel Event Alerts and Notices to Airman (NOTAMs). Important patient safety videos that addressed disclosure issues, health care literacy, Safety Assessment Codes, Root Cause Analysis, Failure Mode Effects and Criticality Analysis and Medical Team Management were shown. Breakout sessions focused on identification of safety deficiencies and corrective actions at specific work centers. The day ended with a general brainstorming session, review and follow-up planning.

Staff reported that the exercise more clearly focused them on the importance of patient safety awareness, improved communication and documentation. Management was made aware of two areas needing attention: first, staff desire for more time at their own work centers to devote to patient safety issues; second, that patient safety education efforts need improvement. Since the Down Day, leadership has issued a formal statement supporting work-center down time related to improving patient safety. In an effort to provide more effective education and staff training, MTM is being imple-

Patient Safety In Action

(continued from page 3)

mented, and mechanisms for responding to staff reports on patient safety issues have been improved.

The 74th Medical Group suggests facilities planning a similar initiative consider these lessons learned from their experience: obtain genuine executive support from the beginning; choose topics and presenters carefully; devote one block of time to presentations and another to work-center activities. Reactions to the Patient Safety Down Day at Wright-Patterson were overwhelmingly positive from both leadership and staff. All involved believe this ambitious effort was a giant step toward a real culture change.

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Patient Safety Center Report

Analysis of Data From MTFs

The initial report of the Military Health System (MHS) Patient Safety Center (PSC) was presented to the Patient Safety Workgroup on March 21, 2002. The report covered the October 1, 2000 to September 30, 2001 fiscal year. It included data from the Pilot Program, which ended March 20, 2001, as well as data from eight Military Treatment Facilities (MTFs). All data received has been entered into the Patient Safety Registry at AFIP.

The Near Miss/Actual Event/Sentinel Event Summary Report forms indicated that the two largest categories of events were medication errors and preventable patient falls. Medication errors were mostly in the near miss category, while patient falls were most frequently reported as SAC 1 events. Other categories with reported events included transfusion errors, procedure errors, patient suicide/attempts, informed consent issues, patient elopement/AMA, delay in diagnosis or treatment, laboratory or radiology issues, utility/equipment systems failures, fire, OR sponge/sharps/instrument counts, and patient injury in restraints.

SAC 3 events were reported in these categories: Medication Errors (2); Wrong Site Surgery (1); Patient Suicides/Attempts (1); Laboratory/Radiology (3) and Delay in Diagnosis/Treatment (1) for a total of eight. Eleven Root Cause Analyses (RCA) were received - one for each of the events listed above; one for a Patient Suicide/Attempt defined as a SAC 2 by the MTF; one Equipment/Utility Event described as a SAC 2; and a Medication Error described as a SAC 1. Three RCAs are pending for SAC 3 events reported in the following categories: Fire, Delay in Diagnosis/Treatment and Miscellaneous (diffuse bleeding from heparinization).

A large volume of events was reported in the Miscellaneous category. It is not clear at this early stage of reporting whether this reflects a design or implementation deficiency, but it is being evaluated by the Patient Safety Center. A subgroup of the Patient Safety Workgroup has been established to provide definitions for existing categories on the reporting form and develop new categories as the need arises.

Conference Calendar

DOD PATIENT SAFETY PROGRAM TRAINING

AUG. 5-7, 2002
WASHINGTON, D.C.
EXACT LOCATION TO BE ANNOUNCED

AUG. 7-9, 2002
WASHINGTON, D.C.
EXACT LOCATION TO BE ANNOUNCED

To confirm training dates and register on-line access: www.afip.org/PSC

INTERNATIONAL SUMMIT ON INNOVATIONS IN PATIENT SAFETY
JUNE 12-14, 2002
SALT LAKE CITY, UTAH
www.ihi.org

Patient Safety

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